What is claimed is:

1) A minimally invasive method of augmenting or replacing of nucleus pulposus of a spinal disc comprising the steps of:

a) preparing a disc treatment site;
b) piercing and inserting into and through the sidewall of the disc's annular ring a cannulated insertion tool; and
c) inserting small intestine submucosa (SIS) through the cannulated insertion tool and into the nucleus pulposus.

2) The method of claim 1, wherein the SIS is in an elongated form.

3) The method of claim 2, wherein the elongated form is selected from the group consisting of strips, cords, braids, tubes, rolls and pellets and combinations thereof.

4) The method of claim 4, wherein the elongated form is a pellet.

5) A minimally invasive method of augmenting or replacing of nucleus pulposus of a spinal disc comprising the steps of:

a) preparing a disc treatment site;
b) piercing and inserting into and through the sidewall of the disc's annular ring a cannulated insertion tool; and
c) inserting an elongated nucleus pulposus augmentation or replacement material through the cannulated insertion tool and into the nucleus pulposus.

6) The method of claim 5, wherein the form of elongated material is selected from the group consisting of strips, cords, braids, tubes, rolls and pellets and combinations thereof.

7) The method of claim 6, wherein the elongated form is a pellet.

8) A method of preparing small intestine submucosa (SIS) implant comprising the steps of:

a) providing a source of SIS;
b) cutting open the SIS to form a sheet; and
c) rolling the SIS sheet to a desired diameter.

9) The method of claim 8, further comprising the step of cutting the rolled sheet of SIS.

10) The method of claim 9, further providing particulate or commutated forms of SIS to be included during the rolling step of forming the SIS sheet .

11) The methods of claims 1-10, further comprising the presence of a bioactive factor or seeding cells in the SIS or nucleus pulposus augmentation or replacement material .

12) The method of claim 11, wherein the bioactive factor is selected group the group consisting of transforming growth factor-beta and agents in the same family of growth factors, platelet-derived growth factors, fibroblast growth factors, insulin-like growth factors, protein polymers such as RGD-

peptides and Indian Hedgehog proteins, anti-inflammatory agents, angiogenic factors, hormones, hyaluronic acid and combinations thereof.

13) The method of claim 12, wherein the transforming growth factor-beta and agents in the same family of growth factors, are not limited TGF-ßl, TGF- ß2, and TGF-ß3, GDF-5, MP52, and BMPs (bone morphogenetic proteins).

14) The method of claim 11, wherein the seeding cells are selected from the group consisting of stem cells, bone marrow cells, fibrocytes, adipocytes, chondrocytes, cells harvested from spinal discs in the body such as nucleus pulposus cells and annulus fibrosis, and combinations thereof.

15) The method of claim 14, wherein the seeding cells are stem cells.